DERWENT-ACC-NO:

2002-615823

DERWENT-WEEK:

200266

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TITLE:

Vertical-driven bicycle

INVENTOR: CHA, JR; YOON, YJ

PRIORITY-DATA: 2000KR-0056051 (September 23, 2000)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

KR 2002023618 A

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N/A

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INT-CL (IPC): B62M009/06

ABSTRACTED-PUB-NO: KR2002023618A

BASIC-ABSTRACT:

NOVELTY - A vertical-driven bicycle is provided to easily transport a heavy-weighted article by limiting the driving range of a pedal within 125-130 angular degrees and by applying a high speed and a high propulsive force.

DETAILED DESCRIPTION - Bearing cores(8) are fixed on both ends of a pedal shaft(1) via fixing keys(10). The end of a pedal fixing bar(C) is welded with a <u>clutch</u> bearing box(7) interposed with the bearing cores and one-way <u>clutch</u> bearings(9). An expansion pedal bar(D) is fitted into the pedal fixing bar. A control screw(E) of the pedal fixing bar is connected to a control hole(F) of the expansion pedal bar. When a front pedal(G) of the expansion pedal bar is lifted down, a pedal return gear(4) and a power transmitting large sprocket gear(3) are rotated with the pedal shaft by the locking of the one-way clutch bearing. Then, the first fixing pipe(2) is sustained by a shaft support bearing. The power transmitting large sprocket gear is locked on a power connecting shaft(13) via a key, while a power transmitting small sprocket gear(15) is driven. Thus, a main driving sprocket gear(23) axially installed on the power connecting shaft is driven. Since the large sprocket gear has 27 gear teeth and the small sprocket gear has 10 gear teeth, 2.7 times of power is transmitted.

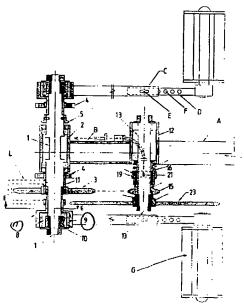
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Basic Abstract Text - ABTX (2):

DETAILED DESCRIPTION - Bearing cores(8) are fixed on both ends of a pedal shaft(1) via fixing keys(10). The end of a pedal fixing bar(C) is welded with a clutch bearing box(7) interposed with the bearing cores and one-way clutch bearings(9). An expansion pedal bar(D) is fitted into the pedal fixing bar. A control screw(E) of the pedal fixing bar is connected to a control hole(F) of the expansion pedal bar. When a front pedal(G) of the expansion pedal bar is lifted down, a pedal return gear(4) and a power transmitting large sprocket gear(3) are rotated with the pedal shaft by the locking of the one-way clutch bearing. Then, the first fixing pipe(2) is sustained by a shaft support bearing. The power transmitting large sprocket gear is locked on a power connecting shaft(13) via a key, while a power transmitting small sprocket gear(15) is driven. Thus, a main driving sprocket gear(23) axially installed on the power connecting shaft is driven. Since the large sprocket gear has 27 gear teeth and the small sprocket gear has 10 gear teeth, 2.7 times of power is transmitted.

International Patent Classifications(Derived) - IPC (1):

B62M009/06



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